

If Schiller Station LLC submits an NOI for coverage under the 2015 MSGP and is authorized to discharge its industrial stormwater, it must comply with all provisions of the 2015 MSGP, including requirements found in Part 8 – Subpart O (Sector O – Steam Electric Generating Facilities) for any applicable activities or materials at the facility. In addition to the monitoring requirements identified in Part 6.2, Schiller is required to complete additional monitoring for total nitrogen, PAHs, and pH per Part 6.2.5 that EPA has determined necessary to meet the permit’s effluent limitations. The rationale for this additional monitoring is found in ...[cite language from IP FS/RTC]

For the purposes of Schiller’s authorization under permit number ##, the monitoring parameters identified in Tables 8.O-1 and 8.O-2 are hereby replaced by the monitoring identified here below, including relevant outfalls and monitoring frequencies:

Outfall	Description	Monitoring Parameter(s)	Frequency ¹	Value/Limit/Type ²
001	Roof & Yard Drains ³	Total Iron (mg/L)	Quarterly	1.0 mg/L (Benchmark)
006	Roof Drains ⁴			
023	Parking Lot Drains ⁵			
011	Tank Farm Yard Drains ⁶	Total Iron (mg/L)	Quarterly	1.0 mg/L (Benchmark)
018	Tank Farm Yard Drains	<u>Group I PAHs (ug/L)⁷</u> Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene	Quarterly	Report

¹ Quarterly means (January-March, April-June, July-September, and October-December) and reported on the monthly DMR following the end of each calendar quarter (i.e., April, July, October, and January).

² “Benchmark” means benchmark monitoring as described in Part 6.2.1 of the 2015 MSGP; “Report” means monitoring results will be reported on DMRs and no value or limit applies; “ELG” means effluent limitations guidelines monitoring as described in Part 6.2.2 of the 2015 MSGP; “Limit” means numeric effluent limit as specified.

³ Monitor prior to commingling with non-contact cooling water discharge (or when off-line) which is monitored separately during dry weather pursuant to NPDES Permit NH0001473

⁴ Monitor prior to commingling with emergency boiler blowdown, deaerator overflow discharges which are monitored separately during dry weather pursuant to NPDES Permit NH0001473

⁵ Monitor stormwater only from parking lot with two chemical loading zones

⁶ Monitor combined flow from the 3 individual pipes.

⁷ The quantitative methodology used for PAH analysis must achieve a minimum level for analysis (“ML”) using approved analytical methods in CFR Part 136. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for an analyte, representative of the lowest concentration at which an analyte can be measured with a known level of confidence. The ML for each Group I PAH compound must be <0.1 µg/L. The ML for each Group II PAH compound must be <1 µg/L. These MLs are based on those listed in Appendix VI of EPA’s Remediation General Permit. Sample results for an individual compound that is at or below the ML should be reported according to the latest EPA Region 1 *NPDES Permit Program Instructions for the Discharge Monitoring Report Forms (DMRs)*. These values may be reduced by modification pursuant to 40 CFR §122.62 as more sensitive tests become available or are approved by EPA and the State.

		Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene <u>Group II PAHs (ug/L)</u> Acenaphthene Acenaphthylene Anthracene Benzo(g,h,i)perylene Fluoranthene Fluorene Napthalene Phenanthrene Pyrene		
		Total Nitrogen (mg/L)	Quarterly	Report
		pH (S.U.) ⁸	Monthly	Limit
013	Emergency Overflow from Coal Pile Runoff Basin ⁹	pH (S.U.)	When in Use	6.0-9.0 S.U. (ELG)
-	Rainfall ¹⁰	pH (S.U.)	Monthly	Report

⁸ The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., unless due to naturally occurring conditions. The pH shall be within 0.5 s.u. of the rainfall when the pH is outside the above range. See Note 10.

⁹ Internal outfall – Monitor prior to comingling with discharge to Outfall 018. This discharge shall consist only of stormwater from the coal pile area during an emergency condition resulting from an actual storm that exceeds the design capacity of the basin (10-year, 24-hour event).

¹⁰ The pH shall be monitored monthly by grab sample. Each grab sample shall consist of four grabs.

PAHs...

EPA believes these requirements are necessary for the protection of human health, to maintain the water quality standards established under Section 303 of the CWA, and to meet New Hampshire's water quality criteria. Should monitoring data indicate the persistence of PAHs in concentrations that may cause or contribute to an excursion above water quality criteria, the permit may be modified, reissued or revoked pursuant to 40 CFR §122.62. Should monitoring indicate PAHs are not detected (using the proper MLs described above) over the first two years of the permit cycle, the permittee may request a reduction in monitoring frequency.

Nutrients... (2015 Fact Sheet Permit No. NH0001473 Page 27 of 212)

A portion of Schiller Station's discharge is transported upstream on the incoming tide into the nitrogen-impaired waters of the Lower Piscataqua and Upper Piscataqua River, Little Bay, and even into Great Bay proper. Therefore, the assessment of the impact of the Facility's discharge on water quality includes all of these waters.

Section 303(d) of the Clean Water Act (CWA) requires states to identify those waterbodies that are not expected to meet surface water quality standards after implementation of technology-based controls. As a result of the documented water quality impairments, portions of the Great Bay Estuary, including its tributaries, have been included on the State of New Hampshire's Section 303(d) list. As mentioned previously, New Hampshire's 2012 Section 303(d) list includes the Lower Piscataqua River -South (Assessment Unit ID: NHEST600031001-0202). This assessment unit is listed as not supporting aquatic life as a result of estuarine bioassessments. These regulatory findings are consistent with a growing body of technical and scientific literature pointing toward an estuary in environmental decline as a result of nutrient overloading.

Given the nutrient overenrichment throughout the Great Bay estuary, it is clear that significant point source and non-point source reductions are necessary in order to achieve water quality standards. Section 301 of the CWA and its implementation regulations obligate EPA to establish water quality based effluent limits for outfalls that may cause or contribute to a violation of water quality standards. EPA and NHDES's shared preference is to address all sources of nutrient pollution to the Great Bay estuary—both point source loading and the far greater component of non-point source loading—in a coordinated and comprehensive fashion, to the extent possible.

The September 2010 permit reapplication submitted by PSNH indicated that various outfalls contained low concentrations of nitrogen in various species. For example, the discharge sampled from Outfall 006 contained 0.9 mg/l of ammonia nitrogen, Outfall 011 contained 0.33 mg/l of nitrate/nitrite nitrogen, Outfall 016 contained 0.32 mg/l nitrate/nitrite nitrogen and 1.2 mg/l total organic nitrogen and Outfall 018 contained 0.32 mg/l of nitrate/nitrite nitrogen. In this case, EPA has determined that the Best Management Practices (BMPs) required in the Stormwater Pollution Prevention Plan (SWPPP) included in the draft permit are expected to reduce total nitrogen levels to a degree necessary to ensure that Schiller Station does not cause or contribute to a water quality standard violation. In developing these BMPs specifically for this permit, EPA has been informed by the BMPs designed to reduce nitrogen in stormwater discharges found in the 2015 draft New Hampshire small MS4 permit. Additionally, a quarterly monitoring requirement for total nitrogen has been established for this outfall in the draft permit in order to track the effectiveness of the BMPs.